Section 3 Stormwater Management Program (SWMP) Requirements

Section D of the MS4 General Permit requires the following:

"The Permittee shall maintain, implement, and enforce an effective SWMP, and develop adequate legal authority to implement and enforce the SWMP, designed to reduce the discharge of pollutants from the permitted MS4 to the MEP and to protect water quality. The SWMP shall serve as the framework for identification, assignment, and implementation of control measures/BMPs. The Permittee shall implement the SWMP and shall subsequently demonstrate its effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the MEP. The SWMP shall be fully implemented by the expiration of the MS4 General Permit, or within five years of designation for Small MS4s designated subsequent to Permit adoption, with reasonable progress made toward implementation throughout the term of the General Permit. Existing programs that have stormwater quality benefits can be identified in the SWMP and be part of a Permittee's stormwater program."

"The SWMP shall be revised to incorporate any new or modified BMPs or measurable goals developed through the Permittee's annual reporting process. The Permittee shall incorporate changes required by or acceptable to the RWQCB Executive Officer into applicable annual revisions to the SWMP and adhere to its implementation."

"The SWMP must describe BMPs and associated measurable goals, that fulfill the requirements of the following six Minimum Control Measures: 1) Public Education and Outreach on Stormwater Impacts; 2) Public Participation and Involvement; 3) Illicit Discharge Detection and Elimination; 4) Construction Site Stormwater Runoff Control; 5) Post-Construction Stormwater Management in New Development and Redevelopment; and 6) Pollution Prevention/Good Housekeeping for Municipal Operations."

3.1 Minimum Control Measures, Best Management Practices and Measurable Goals

The Stormwater Phase II Final Rule and the MS4 General Permit require that the County implement a SWMP that ***"reduces stormwater discharges to the maximum extent practicable (MEP) to protect water quality, meet water quality standards, and comply with receiving water limitations"***. MEP can be achieved by implementing BMPs for the six minimum control measures described below. Measurable goals allow for evaluation of BMP effectiveness in improving stormwater quality.

Minimum Control Measure #1: Public Education and Outreach on Stormwater Impacts

What is required?

Section D.2.a. of the MS4 General Permit requires that regulated Small MS4s develop and implement BMPs, measurable goals and timetables for implementation of the Public Education and Outreach Minimum Control Measure. "The Permittee must educate the public in its permitted jurisdiction about the importance of the stormwater program and the public's role in the program. The Permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impact of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff."

USEPA provides additional guidance in Fact Sheet 2.3, "Public Education and Outreach", which states that this section of the SWMP must include the following minimum requirements:

- Implementation of a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on local water bodies and the steps that can be taken to reduce stormwater pollution; and
- Determination of appropriate best management practices and measurable goals for the public education and outreach minimum control measure.

Why is it necessary?

Public education and outreach is necessary as a means to inform the public about the importance of stormwater pollution prevention. An effective public education and outreach program is essential to ensure public support and compliance. The public education and outreach program must target a number of audiences and must be designed to focus on why stormwater pollution prevention is important, the benefits of stormwater pollution prevention, and how each individual plays a role. Public education and outreach is a critical pollution prevention measure because it helps reduce the source of pollutants that are generated during common everyday urban activities.

Minimum Control Measure #2: Public Participation and Involvement

What is required?

Section D.2.b. of the MS4 General Permit requires that the Permittee comply with all

State and local public notice requirements when implementing a public participation and involvement program.

U.S. EPA provides additional guidance in Fact Sheet 2.4, "Public Participation and Involvement", which says that this section of the SWMP must include the following minimum requirements:

- Comply with applicable State and local public notice requirements; and
- Determine the appropriate best management practices and measurable goals for the public participation and involvement minimum control measure.

Why is it necessary?

BMPs for this minimum control measure are intended to promote community support for the SWMP and to ensure that the community has opportunities to provide input and direction regarding SWMP implementation. Public participation ensures that the program reflects community values and priorities and has the greatest potential for success. An effective public participation and involvement program engages the community, instills a sense of personal ownership for water quality issues, and encourages behavioral changes that can lead to water quality improvement.

Minimum Control Measure #3: Illicit Discharge Detection and Elimination

What is required?

The MS4 General Permit requires that the Permittee adopt and enforce ordinances or take equivalent measures that prohibit illicit discharges. The Permittee must also implement a program to detect illicit discharges. Section D.2.c. of the MS4 General Permit requires that the Permittee:

1) "Develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26(b)(2) into the regulated Small MS4;
2) Develop, if not already completed, a storm sewer map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls;
3) To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into the MS4 and implement appropriate enforcement procedures and actions;
4) Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping to the system that are not authorized by a separate NPDES permit;
5) Inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste; and

6) Address the following categories of non-stormwater discharges or flows (i.e., authorized non-stormwater discharges) only where they are identified as significant contributors of pollutants to the Small MS4:

1. water line flushing;
2. landscape irrigation;
3. diverted stream flows;
4. rising ground waters;
5. uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20) to separate storm sewers;
6. uncontaminated pumped ground water;
7. discharges from potable water sources;
8. foundation drains;
9. air conditioning condensation;
10. irrigation water;
11. springs;
12. water from crawl space pumps;
13. footing drains;
14. lawn watering;
15. individual residential car washing;
16. flows from riparian habitats and wetlands; and
17. dechlorinated swimming pool discharges."

"Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to the waters of the U.S."

"If the RWQCB Executive Officer determines that any individual or class of non-stormwater discharge(s) listed above may be a significant source of pollutants to waters of the U.S. or physically interconnected MS4, or poses a threat to water quality standards (beneficial uses), the RWQCB Executive Officer may require the appropriate Permittee(s) to monitor and submit a report and to implement BMPs on the discharge."

Why is it necessary?

An illicit discharge is defined by U.S. EPA as "a point source discharge of pollutants to a separate storm drain system that is not composed entirely of stormwater and is not authorized by a NPDES permit." Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. Sources of illicit discharges include sanitary wastewater, septic tank effluent, car wash wastewater, improper oil disposal, radiator flushing disposal, laundry wastewater, spills from roadway accidents, and improper disposal of auto and household toxic materials. Controlling and eliminating illicit discharges through a comprehensive stormwater management program can protect public health and safety. The BMPs for this minimum control measure are intended to reduce pollutants in stormwater runoff to receiving

waters. The development and implementation of a system to detect and eliminate sources of illicit discharge and illegal dumping is required.

Minimum Control Measure #4: Construction Site Runoff Control

What is required?

The MS4 General Permit requires that the Permittee develop a program to control the discharge of pollutants from construction sites greater than or equal to one acre in size within its permitted jurisdiction. The program must include inspection of construction sites and enforcement actions against violators.

Section D.2.d. of the MS4 General Permit requires that the Permittee "develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the Small MS4 from construction activities that result in land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre of more. The program must include the development and implementation of, at a minimum:

1) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State, or local law;
2) Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
3) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
4) Procedures for site plan review which incorporate consideration of potential water quality impacts;
5) Procedures for receipt and consideration of information submitted by the public;
6) Procedures for site inspection and enforcement of control measures."

Based on additional guidance provided by EPA in Fact Sheet 2.6, "Construction Site Runoff Control", this section of the SWMP must include the following minimum requirements:

- Have an ordinance or other regulatory mechanism requiring the implementation of proper erosion and sediment controls and controls for other wastes on applicable construction sites;
- Have procedures for site plan review of construction plans that consider potential water quality impacts;

- Have procedures for site inspection and enforcement of control measures;
- Have sanctions to ensure compliance (established in the ordinance or other regulatory mechanism);
- Establish procedures for the receipt and consideration of information submitted by the public; and
- Determine the appropriate best management practices and measurable goals for the construction site runoff minimum control measure.

Why is it necessary?

The intent of this minimum control measure is to prevent the introduction of sediment, construction materials, construction waste and debris, concrete truck washout, sanitary waste, chemicals, and other non-stormwater discharges into the storm sewer system and receiving water bodies. Sediment is an important Pollutant of Concern in San Luis Obispo County.

Minimum Control Measure #5: Post-Construction Stormwater Management in New Development and Redevelopment

What is required?

The MS4 General Permit requires that the Permittee "require long-term post-construction BMPs that protect water quality and control runoff flow to be incorporated into new development and significant redevelopment projects. Post-construction programs are most efficient when they stress (i) low impact design; (ii) source controls; and (iii) treatment controls."

Section D.2.e. of the MS4 General Permit requires that the Permittee:

1) "Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre including projects less than one acre that are part of a larger plan of development or sale, that discharge to the Small MS4 by ensuring that controls are in place that would prevent or minimize water quality impacts;
2) Develop and implement strategies, which include a combination of structural and/or nonstructural BMPs appropriate for the community;
3) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law. For those Small MS4s described in Supplemental Provision E, the requirements must at least include the design standards contained in Attachment 4 of the MS4 General Permit or a functionally equivalent program that is acceptable to the appropriate RWQCB. ***[Note: because the***

population of the County's SWMP coverage area exceeds, 50,000, the requirements of Supplemental Provision E contained in Attachment 4 of the MS4 General Permit apply to this SWMP]; and

4) Ensure adequate long-term operation and maintenance of BMPs."

"The MS4 General Permit does not require redesign of K-12 school or community college facilities that have been submitted to the Department of General Services, Division of the State Architect before adoption of the permit, and which receive final approval from the State Allocation Board or the Public Works Board, as appropriate, on or before December 21, 2004."

Based on additional guidance provided by EPA in Fact Sheet 2.7, "Post-Construction Site Runoff Control", this section of the SWMP must include the following minimum requirements:

- Develop and implement strategies that include a combination of structural and/or non-structural best management practices;
- Have an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls to the extent allowable under State or local law;
- Ensure adequate long-term operation and maintenance of controls; and
- Determine the appropriate best management practices and measurable goals for the post-construction runoff minimum control measure.

Why is it necessary?

The BMPs for this minimum control measure provide one of the best opportunities to reduce the generation of nonpoint source pollution from urban runoff through construction planning and design prior to development. Once a parcel is built, it is increasingly complex and expensive to correct problems. Site design and site-specific considerations are the focus of this minimum control measure. Stormwater pollution prevention considerations are most effective when addressed in the planning and design stages of project development. Effective long-term management and maintenance are critical. The best design opportunities are those with minimum maintenance needs. The goal of the SWMP is to integrate basic and practical stormwater management techniques into new development and significant redevelopment to protect water quality.

Conversion of formerly rural lands to urban development is one of the most important impacts to water quality in San Luis Obispo County. As watersheds become developed, the amount of total impervious surface area in the watershed increases which disrupts the natural hydrology of the watershed. Low Impact Development (LID) is a post-construction stormwater management technology that can protect and improve water quality by helping to restore watersheds to their pre-development hydrology.

Minimum Control Measure #6: Pollution Prevention and Good Housekeeping for Municipal Operations

What is required?

The MS4 General Permit requires that the Permitee examine its own activities and develop a program to prevent the discharge of pollutants from these activities. At a minimum, the program must educate staff on pollution prevention and minimize pollutant sources.

Section D.2.f. of the MS4 General Permit requires that the Permitee:

1) "Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and
2) Using training materials that are available from the U.S. EPA, the State, or other organizations, the program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet building maintenance, new construction and land disturbances, and stormwater system maintenance."

Based on additional guidance provided by U.S. EPA in Fact Sheet 2.8, "Pollution Prevention/Good Housekeeping", this section of the SWMP must include the following minimum requirements:

- Develop and implement an operation and maintenance program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations into the storm sewer system;
- Include employee training on how to incorporate pollution prevention/good housekeeping techniques into municipal operations such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. To minimize duplication of effort and conserve resources, the MS4 operator can use training materials that are available from EPA, their State, or relevant organizations; and
- Determine the appropriate best management practices and measurable goals for the pollution prevention/good housekeeping minimum control measure.

Why is it necessary?

Municipal operations can contribute to stormwater pollution. Some examples of municipal operations that can contribute to stormwater pollution are:

- Road and bridge maintenance which can generate sediment, oil and grease, poly

aromatic hydrocarbons, and other contaminants;
- Streets and storm drains can contribute sediment, trash, and other pollutants;
- Government vehicle and equipment fueling, maintenance, repair, and storage can be a source of oil and grease, gasoline spills, and other automotive fluids;
- County Parks and Golf Courses can be a source of pesticides and fertilizers;
- Corporation yards can be a source of oil and grease and other chemicals;
- Government building and landscape maintenance can be a source of pesticides and fertilizers as well as other chemicals;
- Municipal water treatment facilities can be a source of chlorine; and
- Municipal wastewater treatment facilities can be a source of sewage, chlorine, and other chemicals.

BMPs for pollution prevention and good housekeeping for municipal operations can prevent the introduction of these pollutants into stormwater runoff.

Summary of BMPs Selected for Each Minimum Control for this SWMP

The BMPs the County selected for each Minimum Control Measure are summarized in Table 3.1 below. Each BMP and its measurable goals are described in more detail in Section 4. The BMP implementation timetable and County department responsibilities for the Measurable Goals for each BMP are shown in Section 4, Tables 4.1 – 4.6.

Table 3.1 Summary of Minimum Control Measures and Best Management Practices Selected for this SWMP

Minimum Control Measure	Best Management Practices
1. Public Education and Outreach	▪ Collaborative regional partnerships ▪ Public opinion surveys ▪ Stormwater pollution prevention television public service announcements ▪ Stormwater pollution prevention radio public service announcements ▪ Stormwater pollution prevention brochures targeting residential audiences ▪ Stormwater pollution prevention brochures targeting commercial businesses ▪ Stormwater pollution prevention brochures targeting industrial operations ▪ Stormwater pollution prevention brochures targeting the development community and construction industry ▪ Stormwater pollution prevention educational programs for school age children ▪ Stormwater pollution prevention educational information and activities for college students ▪ Stormwater pollution prevention brochures targeting tourists ▪ Stormwater pollution prevention website ▪ Stormwater pollution prevention library ▪ Stormwater pollution prevention public presentations and workshops ▪ Stormwater pollution prevention public events and displays ▪ Stormwater pollution prevention telephone information and hotline ▪ Special pet waste management public education and outreach campaign ▪ Special anti-litter/trash public education and outreach campaign with emphasis on marine plastic debris ▪ Storm drain marking events ▪ Tributary, watershed, and interpretative signage and displays ▪ Sammy the Steelhead stormwater pollution prevention icon, logo, and slogan ▪ Public education and outreach for municipal employees ▪ Stormwater pollution prevention information targeting quasi-governmental agencies ▪ Community based social marketing incentive programs
2. Public Participation and Involvement	▪ Compliance with public notice requirements for stormwater public participation and involvement activities ▪ Stakeholder meetings and workshops ▪ Coastal and creek cleanup events ▪ Storm drain marking program ▪ Watershed stewardship programs ▪ Adopt-a-Road and Storm Drain program
3. Illicit Discharge Detection and Elimination (IDDE)	▪ Ordinance to prohibit illicit discharges ▪ Storm sewer GIS mapping program ▪ Stormwater pollution prevention hotline for the public to use to report illicit discharges ▪ IDDE inspections ▪ Construction plan review for illicit connections ▪ Sanitary sewer overflow and spill prevention and response program ▪ Septic system management program to detect and eliminate illicit discharges from faulty septic systems ▪ Signage prohibiting illegal dumping ▪ Recycling and hazardous waste programs ▪ Hazardous material spill protection and control procedures and training ▪ Pet waste ordinance ▪ IDDE education and training
4. Construction Site Runoff Control	▪ Revise grading ordinances to require erosion and sediment controls for projects that disturb one acre or more of land and provide sanctions to ensure compliance ▪ Construction site plan reviews ▪ Construction site inspections and enforcement ▪ Construction site runoff control public education and outreach ▪ Construction site BMP policy and procedures manual ▪ Training for municipal operations employees involved in construction ▪ Stormwater pollution prevention hotline for citizen reporting of construction violations

Minimum Control Measure	Best Management Practices
5. Post-Construction Stormwater Management for New Development and Redevelopment	▪ Ordinance revision requiring post-construction stormwater management controls ▪ CEQA checklist revisions for post-construction stormwater management controls ▪ Development review for post-construction stormwater management ▪ Site inspection and self-certification for long-term maintenance ▪ Low Impact Development design standards manual ▪ Low impact development public education and outreach ▪ Low impact development incentive programs ▪ Integrated Regional Water Management Plan goals and objectives ▪ Revisions to the Conservation Element of the General Plan
6. Pollution Prevention and Good Housekeeping for Municipal Operations	▪ County employee training program for stormwater pollution prevention ▪ Street sweeping program ▪ Storm sewer inspection and maintenance procedures and schedules ▪ Stormwater Pollution Prevention Plans (SWPPPs) and inspections for Public Works corporation yards ▪ County road and bridge maintenance procedures for stormwater pollution prevention ▪ County facility stormwater pollution prevention inspections ▪ Hazardous material storage and spill prevention procedures stormwater pollution prevention ▪ County vehicle fuel dispensing and maintenance facility procedures stormwater pollution prevention ▪ County vehicle and equipment cleaning procedures stormwater pollution prevention ▪ Dechlorination procedures for pools and other sources of chlorinated water ▪ County landscaping and lawn care procedures stormwater pollution prevention

Detailed information about the BMPs selected for this SWMP is described in Section 4 which follows.